FORD COUNTY ZONING ORDINANCE

APPENDIX B

STANDARDS FOR WIND ENERGY CONVERSION SYSTEMS

ADOPTED: June 10, 2009 Resolution 09-39

APPENDIX B STANDARDS FOR PRIVATE WIND ENERGY CONVERSION SYSTEMS

I.	INTRODUCTION A. TITLE B. PURPOSE	2-B 2-B
II.	DEFINITIONS	2-B
III.	APPLICABILITY	3-B
IV.	PROHIBITION	3-B
V.	PERMITTED USE APPLICATION	3-B
VI.	DESIGN AND INSTALLATION	4-B
VII.	OPERATION A. MAINTENANCE B. INTERFERENCE	5-B 5-B
VIII.	NOISE LEVELS	5-B
IX.	RESTRICTIONS	5-B
X.	FEES	5-B

I. INTRODUCTION

A. Title

This Ordinance shall amend the Ford County Zoning Ordinance and be known, cited and referred to as Appendix B Standards for Private Wind Energy Conversion Systems (WECS), such private WECS being 100 KW or less.

B. Purpose

This Ordinance is adopted to ensure that any development and production of private wind-generated electricity in Ford County is safe, efficient and effective.

II. **DEFINITIONS**

- **A.** "Applicant" means the entity or person who submits to the County an application for a permitted use for any private WECS.
- **B.** "Owner" means the entity or person with a direct interest in the WECS, including their respective successors and assigns.
- **C.** "Professional Engineer" means a qualified individual who is licensed as a professional engineer in any state in the United States.
- **D.** "Structure" means, for each property, the structure that one or more persons occupy the majority of time for either business or personal reasons.
- **E.** "Private WECS" means all facilities, including the turbine, tower, conversion electronics, control electronics, guy wires, cables and all other related devices and equipment that together convert wind energy into electricity and deliver that electricity to the structure. If the private WECS is designed to allow excess electricity to be routed to a power company then equipment necessary for such routing is also part of the private WECS.
- **F.** "WECS Tower" means the support structure to which the generator and rotor are attached.
- **G.** "WECS Tower Hub Height" means the distance from the center of the rotor hub to the top surface of the WECS tower foundation.
- **H.** "WECS Tower Tip Height" means the distance from the rotor blade at its highest point to the top surface of the WECS tower foundation.

III. APPLICABILITY

This Ordinance governs the permitted use of private WECS 100 KW or less that generate electricity to be used by the owner of the WECS, that person locating the private WECS on their own property, or on rented property with written approval from the owner of the property, for personal use or for metering the excess to a power company.

IV. PROHIBITION

No WECS project for private use shall be constructed, erected, installed or otherwise located within Ford County unless a prior permitted use application has been approved for each separate installation. Once the permitted use application has been evaluated, a construction permit for each separate installation shall be issued by the Ford County Zoning Enforcement Officer before construction begins.

V. PERMITTED USE APPLICATION

- **A.** The applicant must obtain a permitted use application and submit the completed form to the Ford County Zoning Enforcement officer.
- **B.** The permitted use application must include the following:
 - 1. The location of the project by property index number (PIN).
 - 2. The location of the project by a site plan including dimensions of the property and measurements to the tower base from all property lines.
 - 3. The name plate generating capacity.
 - 4. The maximum height of the tower to the tip of the rotor at full upright position, as defined in II. H.
 - 5. The name, address, and phone number of the applicant, owner and operator, and all property owners for the PIN site given.
 - 6. A site plan as defined in (2) above, plus any guy wires, anchor bases, property lines, setback lines, power lines, cabling to a receiving utility (if any) and layout of all structures within the geographic boundaries of any applicable setback.
 - 7. All required proofs of interconnection and approvals within seven (7) days of starting operations.
 - 8. Any other information required by the County as part of its Zoning Ordinance.

VI. DESIGN AND INSTALLATION

- **A.** Private WECS shall conform to applicable industry standards.
- **B.** Private WECS braking system must be present and consistent with industry standards, unless otherwise stated in the interconnection agreement.
- C. The same color standards are required as for commercial wind farms, including painting of towers and blades in flat white, gray, black or another non-reflective, unobtrusive color.
- **D.** Projects shall comply with FAA regulations, and any other federal, state and local laws and regulations.
- **E.** No artificial lighting shall be permitted unless required by the FAA. Required lights shall be shaded to stop glare from extending beyond parcel boundaries.
- **F.** Advertising and "wind stunts" are not permitted, to include banners wind socks, whirling ornaments, flags and other devices added to call attention to the structure.
- **G.** Towers must not be climbable.
- **H.** Blade clearance must be a minimum of 15 feet from blade tip at its lowest level to the base. The lowest part of the arc of the blade must be a minimum of 20 feet above the height of any structure within 50 feet of the installation.
- I. No prohibition is given for maximum height to the blade tip. The maximum height shall not exceed the limit recommended by the manufacturer or distributor of the system.
- **J.** Setbacks shall include the following:
 - 1. Setbacks include guy wires and anchoring systems no closer than 10 feet from adjacent property lines.
 - 2. Setbacks include 1.1 times the maximum tower tip height from adjacent property lines, third party transmission lines, telephone lines, roads, communications towers and from any other occupied structures on the same parcel as the project.
 - 3. Setbacks include 1.5 times the maximum tower tip height from dwellings on adjacent properties.
 - 4. Waivers will be permitted on setbacks. Waivers will be presented in writing by the owners of adjacent properties.

VII. OPERATION

A. Maintenance

If the tower is not functional for a period of 90 days, the county will contact owner by registered letter. Owner has 30 days to reply. If the problem is not repaired in 90 days, the owner has 30 days to remove the private WECS system.

B. Interference

Interference with utilities is not permitted. Owner has 90 days to correct interference or remove the Private WECS. Interference may include microwave transmission providers, local 911 providers, and television and radio reception.

VIII. NOISE LEVELS

Private WECS are limited to 60 dBA at the closest property line, except in storms and outages.

IX. RESTRICTIONS

- **A.** No minimum size is given for the parcel the project is placed on.
- **B.** A private WECS is to be used only for parcel structures, unless excess power is routed and metered to a power company.
- **C.** A private WECS is not allowed on a vacant parcel, unless that parcel is adjacent and is the owner's property.
- **D.** A private WECS on a platted subdivision is governed by the subdivision covenants.
- **E.** A private WECS is not allowed on a recorded easement.
- **F.** A limit of 100 KW is placed on each tower.

X. FEES

A private WECS has a fee of \$100.00 for the permit. A Notice of Completion must be filed with the Zoning Enforcement Officer within seven (7) days of the time the project is operational.